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Multi-Agent Systems

18th European Conference, EUMAS 2021

Virtual Event, June 28–29, 2021

Revised Selected Papers

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Preface

This volume constitutes the revised post-conference proceedings of the 18th European Conference on Multi-Agent Systems (EUMAS 2021). The conference was held online during June 28–29, 2021. 16 full papers are presented in this volume, each of which carefully reviewed and selected from a total of 51 submissions.

The papers report on research regarding a wide range of topics in the field of multi-agent systems. EUMAS 2021 followed the tradition of previous editions (Oxford 2003, Barcelona 2004, Brussels 2005, Lisbon 2006, Hammamet 2007, Bath 2008, Agia Napa 2009, Paris 2010, Maastricht 2011, Dublin 2012, Toulouse 2013, Prague 2014, Athens 2015, Valencia 2016, Evry 2017, Bergen 2018, and Thessaloniki (virtually) 2020) in aiming to provide the prime European forum for presenting and discussing agents research as the annual designated event of the European Association of Multi-Agent Systems (EURAMAS).

The peer-review process carried out put great emphasis on ensuring the high quality of accepted contributions. The 50-person EUMAS Program Committee accepted 16 submissions as full papers. This volume is structured in sections mirroring the presentation sessions of the virtual conference event (<https://biu-ai.com/EUMAS21/>). In addition to the papers included in this volume, the program was highlighted by two great keynote talks, the first one by Catholijn M. Jonker (TU Delft), titled Towards Hybrid Intelligence: A vision on the future of AI and Humankind, and the second one by Ariel Procaccia (Harvard University), titled Democracy and the Pursuit of Randomness.

Based on the reviews, the conference chairs presented two awards for papers that especially stood out: a Best Paper Award was awarded to Barak Steindl and Meirav Zehavi for their paper titled Verification of Multi-Layered Assignment Problems; and a Best Paper Runner Up Award was awarded to Cihan Eran, Onur Keskin, Furkan Canturk and Reyhan Aydogan for their paper titled A Decentralized Token-based Negotiation Approach for Multi-Agent Path Finding. The award recipients were invited to submit an extended version of their papers for fast track publication in the Journal of Autonomous Agents and Multi-Agent Systems (JAAMAS). In addition, selected papers were invited to extend their contribution for a special issue of SN Computer Science.

The editors would like to thank the following:

- all members of the Program Committee, and all additional reviewers, for providing their input regarding the submitted papers;
- all authors for submitting to EUMAS;
- all participants of the virtual conference event;
- the invited speakers for their great talks;
- the editors of JAAMAS for inviting the award recipients to extend their papers and enjoy a fast track publication process.

- the editors of SN Computer Science for supporting a special issue of extended selected papers;
- Davide Grossi, for helping in the background.

July 2021

Ariel Rosenfeld
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